May 16, 2013

Department of Natural Resources Attn: Nelson Velázquez Reyes PO Box 366147 San Juan, Puerto Rico 00936

Re: <u>Cabo Rojo Groundwater Contamination Site Investigation Summary, Cabo Rojo, Puerto Rico</u>
Monitoring Well Installation Permit

Dear Mr. Velázquez:

The site is located in the Bajura ward in Cabo Rojo in southwestern Puerto Rico. Cabo Rojo is serviced by the Cabo Rojo Urbano public water system which is maintained by the Puerto Rico Aqueduct and Sewer Authority (PRASA). The system is supplied by six wells (Hacienda La Margarita, Cabo Rojo 1, Cabo Rojo 2, Cabo Rojo 3, Club de Leones, and Ana Maria) and one surface water source which serves an estimated population of 46,911 people. The Ana María well acts as an independent system which serves approximately 1,856 people. The Ana Maria and Club de Leones wells are located at Pueblo Norte and Bajura wards, respectively. The Ana Maria and Club de Leones wells are currently active with volatile organic compound (VOC) detections at concentrations below federal maximum contaminant levels (MCLs). The site is currently defined as a groundwater plume with no identified source(s) of contamination. Groundwater samples collected from the Cabo Rojo Urbano public water system from 2004 to 2010 indicated that chlorinated solvents tetrachloroethene (PCE), trichloroethene (TCE), and/or 1,1-dichloroethene (1,1-DCE) were detected in the Ana Maria and Club de Leones wells.

The aquifers of concern include the overburden, which consists of bedded sand and gravel alluvium, and the underlying by limestone. The two aquifers are expected to be connected and the primary source of groundwater at the site is the bedrock portion of the aquifer. Groundwater flow is likely influenced by pumping at the public water-supply wells and the cone of depression created by the pumping. According to information published by the United States Geological Survey (USGS), the Club de Leones well is 150 feet deep with an open or screened section from 90 to 150 feet and the Ana María well is 200 feet deep with an open or screened section from 40 to 200 feet.

CDM Smith, on behalf of EPA, mobilized to the Site in April 2013 to begin investigations of six identified potential source areas (PSAs) of contamination identified in the two public supply wells. As part of the investigations, up to 14 shallow (overburden) and up to 5 bedrock monitoring wells will be installed. The purpose of the wells is to identify contamination from PSAs that may be impacting the public supply wells with chlorinated VOC contamination.

The field program calls for the shallow overburden monitoring wells to be installed before the bedrock wells. The shallow wells will be completed as conventional single screen (10-foot screens) wells. The bedrock wells will be completed as multiport wells utilizing FLUTe multiport systems. Geophysical testing and discrete groundwater sampling will be performed on the bedrock wells to assist with determination of the port intervals.